

I claim:

1. A method of accessing and manipulating time-based data of at least two differing data types, comprising the steps of:

(i) selecting a first time-based data source storing a first data type from a selection of available data sources;

(ii) positioning a clip object representing said first time-based data source with respect to a time line to define a start time and duration for accessing said first time-based data source;

(iii) selecting a second time-based data source from said selection of available data sources, said second time-based data source being of a different data type than said first time-based data source;

(iv) positioning a clip object representing said second time-based data source with respect to said time line to define a start time and duration for accessing said second time-based data source;

(v) repeating any of steps (i) through (iv) as desired;

(vi) creating at least one meta-clip object representing said time line and each said clip object positioned relative thereto, said at least one meta-clip object being positionable with respect to a global time line of an edit such that the start time and duration of each of said first and second clip objects in said at least one meta-clip are re-mapped to said global time line; and

(vii) adding said at least one meta-clip object to said list of available data sources.

2. The method as defined in claim 1 wherein at least one of said first and second available data sources comprises a first meta-clip object, each time-based data source in said first meta-clip object being mapped to said time line of said at least one meta-clip object and, in turn, to said global time line.

3. The method as defined in claim 1 further comprising the steps of selecting and applying at least one operator to one or more of said first and second time-based data sources to modify data therefrom, said at least one operator being positioned relative to said time line

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and said operators comprising at least one of a filter and an effect.

4. A method of defining in an NLE system an edit comprising time-based data of at least two different data types, comprising the steps of:

(i) selecting a first time-based data source storing a first data type from a selection of available data sources;

(ii) positioning a clip object representing said first time-based data source with respect to a time line to define a start time and duration for accessing said first time-based data source;

(iii) selecting a second time-based data source from said selection of available data sources, said second time-based data source being of a different data type than said first time-based data source;

(iv) positioning a clip object representing said second time-based data source with respect to said time line to define a start time and duration for accessing said second time-based data source;

(v) repeating any of steps (i) through (iv) as desired;

(vi) creating a new meta-clip object representing said time line and each said clip object positioned relative thereto;

(vii) adding said new meta-clip object to said list of available data sources;

(viii) repeating steps (i) through (vii) as desired;

(ix) selecting at least one meta-clip object from said list of available data sources and positioning said at least one meta-clip object with respect to a global time line of said edit;

(x) re-mapping the start time and duration of each clip object represented by said at least one meta-clip object from the time line of said at least one meta-clip object to said global time line according to the position of said at least one meta-clip object with respect to said global time line.

5. The method as defined in claim 4 wherein at least one of said first and second available data sources comprises a first meta-clip object, each time-based data source in said first meta-clip object being re-mapped to said time line of said at least one meta-clip object and, in turn, to said global time line.

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6. The method as defined in claim 4 further comprising the steps of selecting and applying at least one operator to one or more of said first and second time-based data sources to modify data therefrom, said at least one operator being positioned relative to said time line and said operators comprising at least one of a filter and an effect.

7. The method as defined in claim 4 further comprising the steps of selecting and applying at least one operator to said at least one meta-clip object to modify data from at least one of the time-based data sources thereby represented, said at least one operator being positioned relative to said global time line and said operators comprising at least one of a filter and an effect.

8. The method of claim 7 wherein said at least one operator functions to modify data from each time-based data source represented by said meta-clip.

9. The method of claim 4 further comprising the steps of, when the duration of said at least one meta-clip object is shortened:

(a) examining each clip object represented by said meta-clip object to determine if any portion of the data source represented by said clip object is outside of said altered duration; and

(b) marking any such determined portion inactive to prevent data from said data source within said portion from being included in said edit.

10. The method of claim 4 further comprising the steps of, when the duration of said at least one meta-clip object is lengthened:

(a) examining each clip object represented by said meta-clip object to determine if any portion of the data source represented by said clip object which was previously outside of said altered duration is now inside; and

(b) marking any such determined portion active to allow data from said data source within said portion to be included in said edit.

11. A nonlinear editing system for creating an edit by accessing and manipulating time-based data of at least two different types, comprising:

a storage device to store time-based data sources of at least two different types;

a computer operatively connected to said storage device to access said time-based data sources stored therein;

at least one output device to display to a user a graphical user interface of an NLE program executed by said computer and to output the result of said edit to said user; and

at least one user input device to receive input for said NLE program from a user, said

10 input:

(a) defining the selection of at least two clips, each clip representing a data source, at least one data source being of a different data type than another of said at least two clips;

(b) defining the positioning of each said clip object relative to a time line to define a start time and duration for each represented data source;

15 (c) creating and storing a meta-clip object to represent the selection and positioning of said clips relative to said time line;

(d) defining the selection of a stored meta-clip object;

(e) defining the positioning of said meta-clip object relative to a global time line of said edit; and

20 (f) re-mapping said start time and duration of each clip represented by said meta-clip object according to the relative positioning of said time line and said global time line.

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